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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,501	12/03/2003	Alfred Johann Peter Haszler	APV31528A	3969
7590	10/04/2005		EXAMINER	
STEVENS, DAVIS, MILLER & MOSHER, LLP Suite 850 1615 L Street N.W. Washington, DC 20036			MORILLO, JANELL COMBS	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/725,501	HASZLER ET AL.
	Examiner Janelle Combs-Morillo	Art Unit 1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 July 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,3-5,7-9 and 11-32 is/are pending in the application.
 4a) Of the above claim(s) 29 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,3-5,7-9,11-28 and 30-32 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 09/959,602.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/14/2005</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 9, which is dependent on independent claim 1, mentions a broader range of Sc than claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5, 7-9, 11-28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 799900 A1 (EP'900) in view of WO 95/26420 or Baumann et al (US 5,624,632).

EP'900 teaches an Al-Mg-Mn-Zn alloy suitable for welded components (page 2 line 6) with alloying ranges as set forth in the Table below (see abstract, etc.). EP'900 teaches overlapping ranges of Mg, Mn, Zn, Zr, Cr, Ti, Fe, Si, and Cu, with respect to instant independent claims 1 and 30. EP'900 does not teach the addition of Sc.

However, WO'420 teaches that the addition of Sc to Al-Mg alloys enables stronger welds and assemblies (abstract). WO'420 teaches 0.15-0.60% Sc added to said Al-Mg alloy (WO'420

page 20 lines 6 and 9). It would have been obvious to one of ordinary skill in the art to add 0.15-0.60% Sc (as taught by WO'420) to the Al-Mg-Zn-Mn alloy composition taught by EP'900 because WO'420 teaches that said addition provides for stronger welds and assemblies (abstract).

Alternatively, Baumann teaches that the addition of 0.05-0.5% Sc can be added to Al-Mg alloys in order to improve strength and corrosion resistance (column 2 lines 46-47, 61-62). It would have been obvious to one of ordinary skill in the art to add 0.05-0.5% Sc to the Al-Mg-Zn-Mn alloy taught by EP'900 because Baumann teaches that said additions improve strength and corrosion resistance (column 2 lines 61-62).

	Mg	Mn	Zn	Zr	Cr	Ti	Fe	Si	Cu	Sc
indep. Claim 1	4.0-5.6	0.4-1.2	0.4-1.5	0.05-0.25	0.3 max.	0.2 max.	0.5 max.	0.5 max.	0.4 max.	0.1-0.5
3	4.6-5.6									
4			0.4-0.9							
5			0.5-0.9							
7				0.05-0.20						
8				0.10-0.20						
9										0.01-0.3
11										0.1-0.3
12		0.4-0.6								
13		0.6-0.9								
14							0.15-0.35			
15							0.2-0.3			
16							0.07-0.25			
17							0.10-0.20			
18				0.15% max						
19								0.1% max.		
30	4.0-5.6	0.4-1.2	0.4-1.5	0.25 max.	0.3 max.	0.2 max.	0.5 max.	0.5 max.	0.4 max.	0.1-0.5
32	4.0-4.85									
EP'900 broad	4.5-7	0.4-1.2	0.4-5.0	0.3 max.	0.3 max.	0.2 max.	0.5 max.	0.5 max.	0.4 max. Cu	
Hoffman	3.0-6.5	0.2-1.0	<1.3	<0.30	<0.15	<0.30	<0.8	0.05-0.6	<0.30	

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

Concerning dependent composition claims 2-19, the combination of EP'900 and WO'240 or Bauman teaches an alloy composition that overlaps the instant ranges (see above discussion and Table).

Concerning claims 20-21, EP'900 teaches that said alloy can be formed into a rolled product such as a plate (page 2 line 40). EP'900 teaches a work hardened temper or soft temper can be applied to said Al-Mg alloy (page 3 lines 47-48).

Concerning claims 23-26, the prior art does not teach the proof strength or exfoliation resistance of an Al-Mg-Zn-Mn alloy with the instant alloying ranges. However, where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Because the prior art teaches substantially the same composition processed substantially as presently claimed, then substantially the same results (proof strength or exfoliation resistance) are expected to occur.

Concerning claims 22, 27, and 28, EP'900 teaches that said plate can used in the construction of large welded structures such as vessels for marine and land transportation (page 2 lines 5-10).

Response to Amendment/Arguments

4. In the response filed on July 14, 2005 applicant amended claims 1 and 30, cancelled claims 6 and 10, added new claims 31 and 32, and submitted various arguments traversing the rejections of record.

5. Applicant's argument that the present invention is allowable over the prior art of record because WO'420 teaches a hot rolling temperature lower than the hot rolling temperature taught by the main reference EP'900, has not been found persuasive. Though EP'900 prefers as hot rolling temperature ~500°C, EP'900 still teaches at p 3 that hot rolling is operative between >400°C to <530°C. A reference disclosure must be evaluated for all that it fairly suggests and not only for what is indicated as preferred, *In re Boe*, 53 CCPA 1079, 335 F.2d 961, 148 USPQ 507 (1966), see also MPEP 2123. "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also *Celeritas Technologies Ltd. v. Rockwell International Corp.*, 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998) (The court held that the prior art anticipated the claims even though it taught away from the claimed invention. "The fact that a modem with a single carrier data signal is shown to be less than optimal does not vitiate the fact that it is disclosed.").

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6. Applicant's argument that the present invention is allowable over the prior art of record because neither WO'420 nor Baumann teach the addition of Sc along with Zn has not been found persuasive. The main reference of EP'900 is used to teach the presently claimed ranges of Mg, Mn, Zn, Zr, Cr, Ti, Fe, Si, and Cu. The secondary references of WO'420 and Baumann teach that Sc is a beneficial additive to 5xxx series Al-Mg alloys.

7. In response to applicant's argument that Baumann or WO'420 does not teach Zn, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Zn is an additive of aluminum alloys generally known to have a sacrificial anode effect, thereby improving corrosion resistance. The main reference of EP'900 teaches the motivation to include Zn in the Al-Mg alloy of the invention is to improve corrosion resistance and strength (p 3 lines 4-5). Applicant argues the prior art does not appreciate that adding Sc results in a weldable product with improved corrosion, however, applicant has not shown that there is a synergistic effect by combining the presently claimed alloying elements.

Applicant has not clearly shown specific unexpected results with respect to the prior art of record or criticality of the instant claimed range (wherein said results must be fully commensurate in scope with the instantly claimed ranges, etc. see MPEP 716.02 d).

8. Once a reference teaching product appearing to be substantially identical is made the basis of a rejection, and the examiner presents evidence or reasoning tending to show inherency,

the burden shifts to the applicant to show an unobvious difference. "[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)), see MPEP 2112. In In re Schreiber, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed.Cir.1997), the court held that applicant's declaration failed to overcome a prima facie case of anticipation because the declaration did not specify the dimensions of either the dispensing top that was tested or the popcorn that was used. Applicant's declaration merely asserted that a conical dispensing top built according to a figure in the prior art patent was too small to jam and dispense popcorn and thus could not inherently perform the functions recited in applicant's claims. The court pointed out the disclosure of the prior art patent was not limited to use as an oil can dispenser, but rather was broader than the precise configuration shown in the patent's figure. The court also noted that the Board of Patent Appeals and Interferences found as a factual matter that a scaled-up version of the top disclosed in the patent would be capable of performing the functions recited in applicant's claim. Applicant has not clearly shown an unobvious difference between the instant invention and the prior art's product.

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9. The instant claims remain rejected under ODP in view of the claims of 6,337,147, 6,773,664, 10/776605, and 10/299814, as stated below.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1, 3-5, 7-9, 11-28, and 30-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6,337,147 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US'147 are drawn to an overlapping aluminum alloy composition comprising: 5.0-6.0% Mg, 0.6-1.2% Mn, 0.4-1.5% Zn, 0.05-0.25% Zr, 0.3% max. Sc, 0.5% max. Si, 0.5% Fe max (see US'664 at cl. 4), which overlaps or touches the boundary of the presently claimed alloying ranges. Claims 1, 4, etc. of US'147 teaches said alloy welded into a welded structure, substantially as presently claimed.

12. Claims 1, 4, 5, 7-9, 11-28, and 30-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,773,664 B2. Although the conflicting claims are not identical, they are not patentably distinct

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from each other because the claims of US'664 are drawn to an overlapping aluminum alloy composition comprising: 3.0-4.5% Mg, 0.4-1.4% Mn, 0.4-0.9% M=Zn, 0.05-0.25% Zr, 0.3% max. Sc, 0.10-1.4% Si (see US'664 at cl. 12), 1.0% Fe max, which overlaps or touches the boundary of the presently claimed alloying ranges. Said cast product taught by the claims of US'664 is held to be suitable for welding into a welded structure, substantially as presently claimed.

Provisional ODP

13. Claims 1, 3-5, 7-9, 11-28, and 30-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/776605 (Pub US 2004/0161359 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US'605 teach an overlapping Al-Mg alloy comprising: 2.7-6.0% Mg, 0.4-1.4% Mn, 0.1-1.5% Zn, 0.05-0.25% Zr, 0.3% max. Sc, 1.4% max. Si, 1.0% max. Fe (see US'605 at cl. 1, 7), which overlaps or touches the boundary of the presently claimed alloying ranges. Said cast product taught by the claims of US'605 is held to be suitable for welding into a welded structure, substantially as presently claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. Claims 1, 3-5, 7-9, 11-28, and 30-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/299814 (Pub US 2003/014912 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of

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US'814 teach an overlapping Al-Mg alloy welded structure (see US'814 at cl. 9-11) said alloy comprising: 3.0-4.5% Mg, 0.4-1.4% Mn, 0.4-0.9% Zn, 0.05-0.25% Zr, 0.3% max. Sc, 0.05% max. Si, 0.5% max. Fe, (see US'814 at cl. 1), which overlaps or touches the boundary of the presently claimed alloying ranges.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
GROUP 1700


JCM
September 27, 2005